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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,969	06/02/2001	Kae-Jy Chou	UPA-01159	3049

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EXAMINER	
NGUYEN, TRONG NHAN P	
ART UNIT	**PAPER NUMBER**
2152	

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/872,969	CHOU ET AL.	
	Examiner	Art Unit	
	Jack P Nguyen	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 June 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-5 are being examined.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoobridge et al, 6,326,926 (Shoobridge hereafter) in view of Peters, 6,601,093 (Peters hereafter).

As per claim 1, Shoobridge teaches a method for enlarging communication range of Bluetooth (BT) (col. 5, lines 64-65) data applicable to a communication system composed of at least a client electronic machine (66, fig. 2; mobile device), a Bluetooth server (60, fig. 1); and a Bluetooth agent (54b, fig. 2; *wireless access point (WAPt) is functionally equivalent to Bluetooth agent*), the method comprising the following procedures (col. 6, lines 13-16): Executing a searching procedure for the client electronic machine to search the Bluetooth agent for Bluetooth service, wherein the Bluetooth agent is to compare and transmit the new Bluetooth service information to

the client electronic machine immediately upon receipt of a search instruction from the client end (col. 6, lines 44-46; *the mobile device [66, fig. 2] searches for and communicates with one of the access points [54b, fig. 2] within a geographic cell)*; Executing a linking procedure for the Bluetooth agent (access point) to request the Bluetooth server for linking after receipt of a link request from the client end, and transfer the response signal of the Bluetooth server to the client electronic machine; Executing a data transmission procedure, wherein either an upload or a download bluetooth data pack is transmitted to the bluetooth server or the client electronic machine via the bluetooth agent; and Executing an unlink procedure, wherein either the client electronic machine or the bluetooth server may request the bluetooth agent to unlink, and the latter will do as wished upon receipt of the request (col. 6, lines 44-58; *upon establishing communications with the access point [54b, fig. 2], the mobile device [66, fig. 2] uses the access point as a conduit for communicating with the host server [60, fig. 2] in order to send and share data. However, when the mobile device is in range with the server, it can communicate directly with the server bypassing the access point.)* Shoobridge does not specifically teach periodically search the server for service information and storing service information at the agent. Peters, however, teaches the Bluetooth device (135, fig. 1, col. 6, lines 47-49) periodically searching or polling the server (125, fig. 1) for services and storing and updating the services in its memory (col. 3, lines 27-32; col. 8, lines 15-18 and lines 25-28). Hence, it would have been obvious to one of ordinary skill in the art to be motivated to periodically search for the server in order to update the server services and to maintain communication with

the server and other devices without service interruptions as disclosed in col. 3, lines 4-8. When the device is out of range, it can search for other servers or devices or move back within the range of the existing server.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shoobridge in view of Bluetooth – "RFCOMM with TS 07.10", 11/29/99, (Bluetooth1 hereafter).

As per claim 2, Shoobridge does not specifically teach the inner workings of the Bluetooth protocol stack used in communication between Bluetooth devices. However, it is known in the art that the linking and the data transmission procedure in a bluetooth communication protocol RFCOMM layer and performs data transmission or data transference through the Data Link Connection Identifier (DLCI) channel (see Bluetooth1, page 393, fig. 2.2, 2nd and 3rd paragraphs).

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoobridge in view of Lind et al – "Specification of the Bluetooth System", 12/01/99, (Lind hereafter).

As per claims 3-5, Shoobridge does not specifically teach the specification of the Bluetooth protocol stack used in communication between Bluetooth devices. It is known in the art to use a plurality of Bluetooth (BT) profiles such as Bluetooth Generic

Access Profile, a Bluetooth Serial Port Profile, a Bluetooth Service Discovery Application Profile, etc. and their components to establish Bluetooth sessions between BT devices (see Lind – Specification of the Bluetooth System - Master Table of Contents and Index for BT specification details). It would have been obvious to one of ordinary skill in the art to modify the above teachings to customize the components and commands of the BT protocol stack and its profiles according to their requirements and naming standards. One of ordinary skill in the art would have been motivated to use Bluetooth technologies as a low-cost alternative for short-range wireless communications as discussed in claim 1 above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Larsson et al, 6,751,200 ; Eng et al, 6,771,933 ; Blight et al, 6,785,542 ; Johansson et al, 6,480,505 ; Raith, 6,493,550

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack P Nguyen whose telephone number is (703) 605-4299. The examiner can normally be reached on M-F 8:30-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jpn

Dung C. Dinh
Primary Examiner